# SOUTH DAKOTA ORAL HEALTH SURVEY 2006



SOUTH DAKOTA DEPARTMENT OF HEALTH

## South Dakota Oral Health Survey 2006

## Doneen Hollingsworth, Secretary Department of Health

Prepared by:
Jacy Clarke
Chronic Disease Epidemiologist
South Dakota Department of Health
Office of Health Promotion

Technical Assistance Provided by: Kathy Phipps, DrPH ASTDD Data Coordinator

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#### **Acknowledgements**

The main preparer of this report was:

Jacy Clarke Chronic Disease Epidemiologist South Dakota Department of Health 615 East 4<sup>th</sup> Street Pierre, SD 57501

Technical Assistance was provided by:

Kathy Phipps ASTDD Data Coordinator PO BOX 1006 Morro Bay, CA 93443

The following South Dakota Department of Health personnel also contributed to the development of this report:

Barb Buhler Public Information Officer

Teri Christensen Tobacco Control Program Project Director

Julie Ellingson Oral Health Program Coordinator

Kathy Miller Office Supervisor

Colleen Winter Administrator, Office of Health Promotion

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This report, as well as supplemental oral health information is also available on the Department of Health website: http://www.state.sd.us/doh/oralhealth

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#### INTRODUCTION

Dental disease is a serious public health issue and affects overall health and productivity. It can lead to pain and disfigurement, low self-esteem, lost school days, nutritional problems, and in the case of periodontal disease, possible cardiac complications.

Tooth decay is an infectious disease affecting children and adults. Although dental caries (tooth decay) is largely preventable, it remains the most common chronic childhood disease, five times more common than asthma and seven times more common than hay fever (US Department of Health and Human Services, 2000). This health problem begins early. National statistics show that 17 percent of children aged 2-4 years have already had decay. By the age of 8, approximately 52 percent of children have experienced decay, and by the age of 17, dental decay affects 78 percent of children (CDC, 2005).

In order to conduct surveillance of oral health disease trends and treatments in South Dakota, the Department of Health in cooperation with the South Dakota Dental Association, conducted a statewide assessment of third grade students during the 2006 academic year. The purpose of the survey was to obtain data regarding the oral health of children in South Dakota. The survey collected information on caries (cavities) experience, the prevalence of dental sealants, and the need for urgent treatment. The results of the survey will be used in a variety of ways including: monitoring trend data, assessing the extent of children's oral health needs, and providing direction for prevention programs. This report summarizes the major findings of that survey.

#### SUMMARY

During the 2005-2006 school year, the South Dakota Department of Health conducted a statewide oral health survey of third grade children in public, private and Bureau of Indian Affairs (BIA) elementary schools. Thirty-three elementary schools were randomly selected and 32 agreed to take part in the survey. Volunteer dentists and hygienists screened those children who returned a positive consent form. A total of 656 children returned the questionnaire/consent form and 643 were screened (66 percent of all third grade children enrolled in the 32 participating schools).

#### **Key Findings**

- Sixty-six percent of the children had cavities and/or fillings (decay experience) and 33 percent of the children had untreated dental decay (cavities). Dental decay is a significant public health problem for South Dakota's children.
- Thirty-nine percent of the children did not have dental sealants. In 2006, 61% of the third grade children screened had dental sealants compared to 50% in 2003. Seventy percent of American Indian children had dental sealants in 2006. During the last three years, the prevalence of dental sealants has increased dramatically in South Dakota. While dental sealants are a proven method for preventing decay, many of South Dakota's children have not received this preventive service.
- ⇒ Thirty-three percent of the children were in need of dental care including 6 percent that needed urgent dental care because of pain or infection. A large proportion of South Dakota's children are in need of dental care.
- ⇒ Compared to white non-Hispanic children, a significantly higher proportion of American Indian children have decay experience (62% vs. 84%) and untreated decay (28% vs. 51%).
- ⇒ Forty-one percent of children that participate in the free/reduced price school lunch program had untreated decay compared to only 27% of children not eligible for the program. Low income children have poorer oral health.

#### Comparisons of the 2006 Data with the 2003 Survey:

- **Decay experience:** 66 percent of the third graders surveyed have had decay in the 2006 survey compared to 67 percent in 2003.
- **Need for dental care:** 33 percent of the third graders in the 2006 survey were in need of dental care compared to 30 percent in 2003.
- **Sealants**: 61 percent of the third graders in the 2006 survey had dental sealants compared to 50 percent in 2003.

These comparisons indicate a significant improvement in the percentage of children with dental sealants. There was also a slight decrease in the overall percentage of cavities; however, the percentage of children with a history of dental caries has increased.

#### Methods

Sampling: An electronic list of all elementary schools in South Dakota was obtained from the Department of Education. The sampling frame was limited to public, private and Bureau of Indian Affairs schools (380 schools and approximately 10,073 children). The sampling frame was then further limited to those schools with three or more students in third grade (333 schools and approximately 10,000 children).

Schools in the sampling frame were ordered by percent of children eligible for the free and/or reduced price meal program, then by school district number. Thirty-three elementary schools were randomly selected for participation in the oral health survey. If a school refused, a replacement school was randomly selected from the same sampling strata.

One of the schools, along with its replacement, was not eligible due to lack of sufficient sample size, which resulted in 32 schools with an enrollment of 977 children in third grade. Only those children that returned a positive consent form were screened.

Screening Methods: Thirty-four volunteer dentists, three dental hygienists, as well as numerous dental assistants completed all of the screenings. The screenings were completed using gloves, a hand held flashlight, and disposable mirrors. If necessary, a Q-tip was used to remove excess debris, as well as to check for the presence of dental sealants. <sup>1</sup>

Data Management and Analysis: Epi Info Version 3.3.2, a public access software program developed and supported by the Centers for Disease Control and Prevention, was used to enter and analyze the data. To account for differences in response rates between schools, the data were adjusted for non-response. The number of children enrolled in each school was divided by the number of children screened to obtain the non-response sampling weight for each school.

#### Results (Table 1A and 1B)

The total third grade enrollment in the 32 participating schools was 977. Of these, 656 returned a questionnaire/consent form and 643 children were screened (66% response rate). The children screened ranged in age from 7-11 years with a mean of 8.8 years. About half of the children screened were female (48%) and the majority (86%) were white non-Hispanic. Refer to Tables 1A and 1B for further demographic information.

In terms of eligibility for the free and/or reduced price meal program, the schools participating in the oral health survey were representative of the state as a whole.

<sup>&</sup>lt;sup>1</sup> The diagnostic criteria outlined in *Basic Screening Surveys: An Approach to Monitoring Community Oral Health* were used in the 2005 Oral Health Survey.

Approximately 37 percent of all South Dakota's elementary school children receive free and/or reduced price meals compared to 34 percent of the children in the participating schools. Of the children with information on participation in the free/reduced school lunch program, 27% participate in the program.

All data presented in the text of this report have been adjusted for non-response.

Table 1A – Includes "Unknown"

Demographic Characteristics of Children Participating in South Dakota's Oral Health Survey

All Children who Returned a Questionnaire and Children Screened

Variable	Number	All Children who Returned a Questionnaire (n=656)
Gender		
% Male	656	48.3
% Female	030	45.0
% Unknown		6.7
Age:		8.8
Mean age (standard deviation)	652	7-11 years
Age range		7 11 yours
Race and Ethnicity		
% White		77.7
% American Indian/Alaska Native		8.5
% Hispanic	656	1.7
% African American		2.1
% Asian		0.8
% Other/Unknown		9.2
Eligible for Free/Reduced Lunch		
% No	656	63.7
% Yes	000	23.8
% Unknown		12.5
		Children who were Screened (n=643)
Gender		
% Male	643	48.1
% Female	043	45.7
% Unknown		6.2
Age:		0.70 (0.57)
Mean age (S.D.)	643	8.78 (0.57)
Age range		7-11 years
Race and Ethnicity		
% White		77.9
% American Indian/Alaska Native		8.7
% Hispanic	643	1.7
% African American		2.2
% Asian		0.8
% Other/Unknown		8.9
Flinible for Free/Ded 1 and 1		
Eligible for Free/Reduced Lunch % No		60.0
	643	63.9
% Yes		24.1
% Unknown		12.0

Table 1A presents percentages with "unknown" included while Table 1B excludes "unknown" from the denominator.

Table 1B – Does Not Include "Unknown"

Demographic Characteristics of Children Participating in South Dakota's Oral Health Survey

All Children who Returned a Questionnaire and Children Screened

Variable	Number	All Children who Returned a Questionnaire (n=656)	
Gender % Male % Female	612	51.8 48.2	
Age:  Mean age (standard deviation)  Age range	652	8.78 (0.57) 7-11 years	
Race and Ethnicity % White % American Indian/Alaska Native % Hispanic % African American % Asian	596	85.6 9.4 1.8 2.3 0.8	
Eligible for Free/Reduced Lunch % No % Yes	574	72.8 27.2	
Gender % Male % Female	603	Children who were Screened (n=643)  51.2 48.8	
Age: Mean age (S.D.) Age range	643	8.78 (0.57) 7-11 years	
Race and Ethnicity % White % American Indian/Alaska Native % Hispanic % African American % Asian	587	85.3 9.5 1.9 2.4 0.9	
Eligible for Free/Reduced Lunch % No % Yes	566	72.6 27.4	

#### Oral Health Status Indicators (Table 2)

Sixty-six percent of the children screened had decay experience (untreated decay or fillings) in their primary and/or permanent teeth and approximately 33 percent of the children had untreated decay at the time of the screening. Almost 28 percent were in need of early dental care while almost six percent of the children were in need of urgent dental care because of pain or infection.

More than 61 percent of the children had a dental sealant on at least one permanent molar. Dental sealants provide an effective way to prevent decay on the chewing surfaces of molars (back teeth), which are most vulnerable to dental decay. A clear resin is used to cover the "pits and fissures" on the top of the teeth so that cavity-causing bacteria cannot reach areas that are difficult to clean and for fluoride to penetrate.

Table 2

Variable	Number with Data	Percent of Children	95% Confidence Interval
Caries Free	638	34.4	31.4 – 37.5
Caries History	638	65.6	62.5 – 68.6
Untreated Decay	641	32.9	29.9 – 35.9
Dental Sealants	642	61.1	57.2 – 64.8
Treatment Urgency -none -early -urgent	643	66.6 27.8 5.6	63.6 - 69.6 25.0 - 30.8 4.2 - 7.2

<sup>,</sup> The percent of children with untreated decay is assumed to be an under estimation because radiographs (x-rays) were not taken.

#### Access to Care Indicators (Tables 3-4)

Most of the parents (75%) reported having some type of dental insurance coverage for their child – 18 percent reported government insurance (Medicaid, IHS or both) and 54 percent reported private insurance.

Almost 81 percent of the parents reported that their child had visited the dentist in the last 12 months while three percent reported that their child had never been to the dentist. The primary reasons for not having been to the dentist in the last year were "cost" (n=50), "no reason to go" (n=39), and "difficulty in getting appointment" (n=25).

Table 3
Last Dental Visit and Payment for Dental Care for South Dakota's Third Grade Children
All Children Who Returned a Questionnaire – Not Adjusted for Non-Response

Variable	Number	Percent of Children	95% CI
Last Dental Visit Within last 12 months Within last 2 years 3 or more years ago Never been to dentist	585	80.7 13.5 2.7 3.1	77.2 - 83.8 10.9 - 16.6 1.6 - 4.5 1.9 - 4.9
Payment for Dental Care Cash Government insurance* Private insurance Other	565	25.3 18.4 53.6 2.7	21.8 - 29.1 15.3 - 21.9 49.4 - 57.8 1.5 - 4.4

<sup>\*</sup> Includes Medicaid and Indian Health Service.

Table 4
Reasons Why Child Had Not Been to Dentist in Last Year
All Children Who Returned a Questionnaire – Not Adjusted for Non-Response

Reason	Number of Responses
Cost	50
No reason to go	39
My child is too young to see a dentist	1
Do not have or know a dentist	10
Difficulty in getting appointment	25
Fear, apprehension, pain or dislike going	8
Cannot get to the dental office/clinic	2
Other reason	37

#### Impact of Dental Visit Frequency (Table 5)

While the majority of parents (81%) reported that their child saw a dentist within the last 12 months, almost 18 percent of parents reported that their child had either not seen a dentist in the last year (16%) or had never been to the dentist (3%). Compared to children who had not been to the dentist in the last year, children whose parents reported a dental visit in the last year were more likely to have dental sealants (69% vs. 35%) and less likely to have a history of dental caries (62% vs. 79%) and untreated decay (27% vs. 55%). In addition to differences in oral health status, a significantly higher proportion of children who had seen the dentist in the last year were white non-Hispanic and had private dental insurance; while a significantly lower proportion were eligible for the school lunch program.

Table 5
Oral Health of South Dakota's Third Grade Students
Stratified by Time Since Last Dental Visit

Adjusted for Non-Response

_	Percent of Children (95% Confidence Interval)		
Variable	Within Last Year	More Than 1 Year Ago	Never Been to Dentist
	(n=463)	(n=95)	(n=18)
White non-Hispanic	87.9	71.3	52.7
	(85.2-90.2)	(63.3-78.7)	(34.0-69.5)
With Private Insurance	60.7	28.1	7.3
	(56.9-64.4)	(20.9-36.7)	(0.1-25.2)
Eligible for FRL	22.2	49.0	62.6
	(19.1-25.5)	(40.3-57.4)	(41.7-79.0)
Caries History	62.1	78.5	57.4
	(58.3-65.8)	(70.7- 84.8)	(39.2- 75.5)
Untreated Decay	26.6	55.1	32.9
	(23.3- 30.1)	(46.4- 63.2)	(16.6- 51.2)
Dental Sealants	68.7 (65.1- 72.2)	34.5 (26.9- 43.0)	0.0
Treatment Urgency	72.2 (60.7.76.5)	42.9 (25.5.52.2)	60 2 (44 9 76 0)
None	73.3 (69.7-76.5)	43.8 (35.5-52.3)	60.3 (41.8-76.9)
Early	24.4 (21.3-27.9)	47.2 (38.8-55.7)	26.3 (13.2-45.3)
Urgent	2.3 (1.4-3.8)	9.1 (4.9-15.0)	13.4 (3.5-28.7)

#### Impact of Race and Ethnicity (Table 6)

Almost 86 percent of the children screened were white non-Hispanic while nine percent were American Indian. When stratified by race, significant differences in oral health status appeared. Compared to white non-Hispanic children, American Indian children were significantly more likely to have a history of caries and untreated decay. In addition, a significantly lower proportion of American Indian children had private dental insurance or visited the dentist in the last year; while a significantly higher proportion were eligible for the school lunch program.

Note: The number of children in other minority groups was too small for stratification.

Table 6
Oral Health of South Dakota's Third Grade Students
Stratified by Race and Ethnicity
Adjusted for Non-Response

	Percent of C	hildren (95% Confide	ence Interval)	
Variable	White Non- Hispanic (n=501)	American Indian (n=56)	Other Minority Children (n=33)	
With Private Insurance	58.3	20.7	37.9	
	(54.6-62.0)	(12.3-32.4)	(20.7 – 57.7)	
Eligible for FRL	20.5	67.9	54.5	
	(17.6-23.6)	(55.5-78.3)	(36.4 – 71.9)	
With Dental Visit in Last	83.3	66.9	60.6	
Year	(80.4-86.0)	(55.1-78.0)	(42.1 – 77.1)	
Caries History	61.9	84.3	57.6	
	(58.2-65.5)	(77.0-90.5)	(39.2 – 74.5)	
Untreated Decay	28.2	50.5	39.4	
	(24.9-31.6)	(41.5-59.7)	(22.9 – 57.9)	
Dental Sealants	63.0	70.0	48.5	
	(59.4-66.5)	(61.2-78.0)	(30.8 – 66.5)	
Treatment Urgency				
None	70.6 (67.1-73.8)	52.0 (43.0-61.2)	60.6 (42.1-77.1)	
Early	26.2 (23.1-29.6)	31.9 (24.1-41.2)	36.4 (20.4-54.9)	
Urgent	3.2 (2.1-4.9)	16.1 (10.2-23.8)	3.0(0.1-15.8)	

#### Impact of Insurance Type (Table 7)

When stratified by insurance type (private insurance, government insurance, cash only), significant differences in oral health status appeared. Compared to children with private insurance, children with government insurance as well as children who paid cash for dental care were significantly more likely to have untreated decay and less likely to have visited the dentist in the last year.

Table 7
Oral Health of South Dakota's Third Grade Students
Stratified by Dental Insurance Status
Adjusted for Non-Response

	Percent of Children (95% Confidence Interval)			
Variable	Private Dental Insurance+ (n=299)	Government Dental Insurance++ (n=103)	Cash Only (n=140)	
White non-Hispanic	93.1	58.1	95.4	
	(90.3-95.2)	(50.3-65.8)	(91.1-97.8)	
Eligible for FRL	9.4	83.1	16.5	
	(7.0-12.7)	(76.6-88.5)	(11.4-22.4)	
With Dental Visit in Last Year	91.2	66.7	71.2	
	(88.0-93.6)	(58.8-73.6)	(64.1-77.4)	
Caries History	57.5	74.5	67.4	
	(52.7-62.1)	(67.3-81.1)	(60.3-74.0)	
Untreated Decay	24.6	41.2	35.8	
	(20.7-28.9)	(33.6-49.0)	(29.2-43.2)	
Dental Sealants	69.9	50.6	47.3	
	(65.4-74.1)	(42.7-58.4)	(40.2-54.8)	
Treatment Urgency				
None	75.4 (71.1-79.3)	60.7 (52.9-68.1)	60.6 (53.4-67.7)	
Early	22.0 (18.3-26.2)	32.9 (25.8-40.5)	34.2 (27.7-41.6)	
Urgent	2.6 (1.4-4.7)	6.4 (3.3-11.4)	5.2 (2.5-9.4)	

<sup>+</sup> Includes those who reported private dental insurance plus those who reported both IHS and private dental insurance or other and private

<sup>++</sup> Includes those who reported Medicaid and/or IHS. Participants who reported both Medicaid and private insurance (n=9) were classified as "government".

#### Impact of Socioeconomic Status (Tables 8 & 9)

Eligibility for the free and/or reduced price school lunch (FRL) program is often used as a surrogate measure of socioeconomic status (SES). Table 8 presents demographic and oral health information stratified by a child's eligibility for the FRL program. Children eligible for FRL have poorer oral health compared to children not eligible.

Table 9 presents information stratified by the proportion of children in each school eligible for the free and/or reduced price meal program (<20%, 20-49%,  $\ge 50\%$ ).

Compared to children in higher income schools (<20% eligible for F/R meals), children in middle and lower income schools were significantly more likely to have untreated decay. The proportion of children with dental sealants, however, did not differ in higher and lower income schools.

Table 8
Oral Health of South Dakota's Third Grade Students
Stratified by Child's Participation in the Free/Reduced Lunch Program
Adjusted for Non-Response

_	Percent of Children (95% Confidence Interval) Participates in Free/Reduced Lunch Program			
Variable	No (n=411)	Yes (n=155)		
White Non-Hispanic	93.0 (90.7-94.9)	61.2 (54.8-67.5)		
With Private Insurance	66.5 (62.5-70.2)	19.4 (14.5-25.5)		
With Dental Visit in Last Year	86.4 (83.3-88.9)	63.2 (56.7-69.4)		
Caries History	59.5 (55.5-63.5)	75.9 (69.8-81.1)		
Untreated Decay	26.7 (23.3-30.5)	41.1 (34.8-47.7)		
Dental Sealants	65.5 (61.5-69.2)	47.8 (41.3-54.4)		
Treatment Urgency None Early Urgent	72.9 (69.2-76.4) 24.3(20.9-27.9) 2.8 (1.7-4.6)	57.3 (50.6-63.6) 36.7 (30.5-43.1) 6.0 (3.3-9.7)		

Table 9
Oral Health of South Dakota's Third Grade Students
Stratified by Percent of Students Eligible for the Free and/or Reduced Price Meal Program
Adjusted for Non-Response

	Percent of Children (95% Confidence Interval)			
Variable	< 20% of Students	20-49% of Students	≥ 50% of Students	
	Eligible for FRL	Eligible for FRL	Eligible for FRL	
	(n=333)	(n=195)	(n=115)	
White Non-Hispanic	89.4	82.7	33.0	
	(86.2-92.0)	(77.6-86.9)	(27.1-39.4)	
With Private Insurance	63.3	46.4	32.2	
	(58.6-67.7)	(40.2-52.5)	(23.2-42.0)	
With Dental Visit in Last Year	85.7	74.0	71.4	
	(81.4-89.3)	(67.1-80.0)	(57.8-82.7)	
Eligible for FRL	16.7	33.2	59.9	
	(13.4-20.5)	(27.6-39.1)	(50.5-68.5)	
Caries History	57.8	66.4	80.0	
	(53.2-62.3)	(60.6-72.2)	(74.3-84.9)	
Untreated Decay	27.4	39.1	36.5	
	(23.4-31.7)	(33.4-45.3)	(30.3-43.0)	
Dental Sealants	63.9	56.5	67.8	
	(59.3-68.2)	(50.4-62.5)	(61.4-73.7)	
Treatment Urgency None Early Urgent	73.7 (69.4-77.6) 21.0 (17.5-25.1) 5.3 (3.5-7.8)	56.7 (50.5-62.5) 41.1 (35.2-47.1) 2.2 (0.8-4.7)	64.4 (57.9-70.5) 25.6 (20.0-31.5) 10.0 (6.6-14.7)	

#### Trends in Oral Health Status (Table 10)

Since the last statewide oral health survey in 2003, there has been no change in the proportion of children with a history of dental caries or in the proportion of children with untreated decay. There has, however, been a significant increase in the proportion of children with dental sealants.

Table 10
Oral Health of South Dakota's Third Grade Children in 2003 and 2006
Compared to Healthy People 2010
Adjusted for Non-Response

	Percent of Children (95% Confidence Interval)		
Variable	South Dakota 3 <sup>rd</sup> Grade 2003	South Dakota 3 <sup>rd</sup> Grade 2006	HP 2010 Objective 6-8 year old children
Caries History	66.9 (60.8 – 73.0)	65.6 (62.5 – 68.6)	42
Untreated Decay	30.2 (22.8 – 37.5)	32.9 (29.9 – 35.9)	21
Dental Sealants	49.6 61.1 (44.2 – 55.0) (57.2 – 64.8)		50
8 Year Olds Only			
Dental Sealants	52.7 (43.8- 61.7)	57.6 (50.1 – 64.8)	50

#### Healthy People 2010 Objectives (Table 10)

The National Oral Health Objectives for the Year 2010 (Healthy People 2010) outline several oral health status objectives for young children. For six- to eight-year-old children there are three primary oral health status objectives:

- To decrease the proportion of children who have experienced dental caries in permanent or primary teeth to 42 percent.
- To decrease the proportion of children with untreated dental caries in permanent or primary teeth to 21 percent.
- To increase the proportion of eight-year-olds receiving protective sealing of the occlusal surfaces of permanent molar teeth to 50 percent.

The State of South Dakota has exceeded the Healthy People 2010 objective for dental sealants. Unfortunately, significant progress must still be made in terms of caries history and untreated decay if South Dakota is to meet the other two objectives. About 66 percent of third grade children screened in South Dakota had experienced dental

caries – much higher than the HP2010 objective of 42 percent. Almost 33 percent of the South Dakota children had untreated caries compared to the HP2010 objective of 21 percent. More than 61 percent of the third grade students screened had dental sealants compared to the HP2010 objective of 50 percent.

#### Comparison to Other States (Figures 1-3)

Figures 1-3 compare the oral health of South Dakota's third grade children with the oral health of third grade children from several other states. Each of the states on the graphs collected data in a manner similar to South Dakota.

Figure 1
Prevalence of untreated decay in third grade children stratified by state

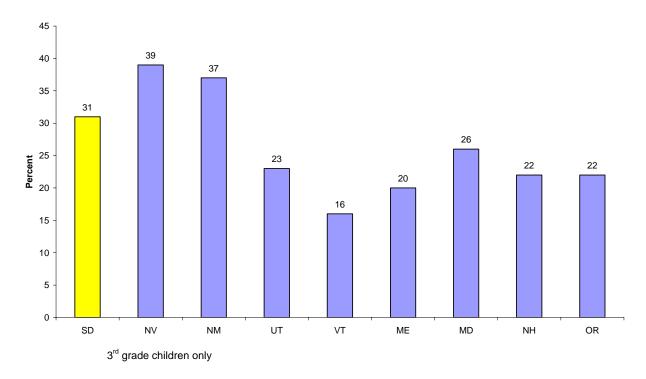


Figure 2
Prevalence of caries experience in 3rd grade children stratified by state

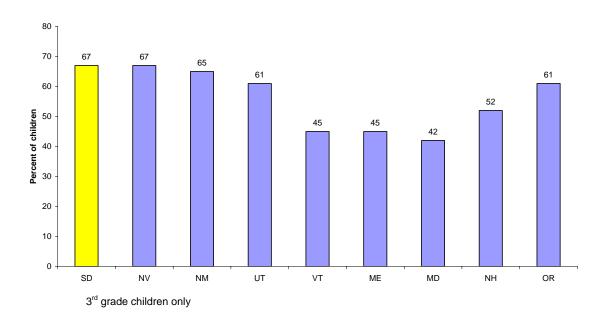
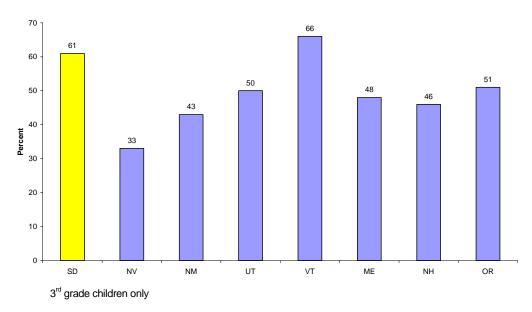


Figure 3
Prevalence of dental sealants in 3rd grade children stratified by state

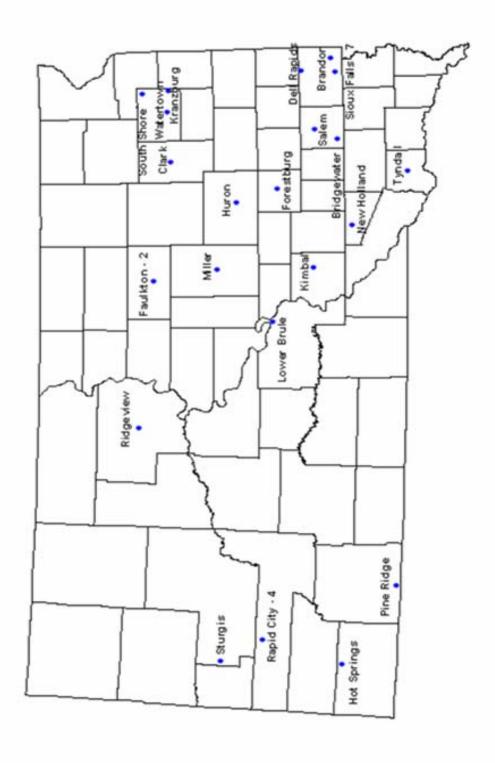


#### **APPENDICES**

Table 11 Information about Participating Schools

School Name	City	School Type	Number Screened	Number Enrolled	Response Rate	Non- Response Weight
All City	Sioux Falls	Public	23	25	92.0%	1.087
Bethesda Lutheran	Hot Springs	Private	6	9	66.7%	1.500
Brandon	Brandon	Public	53	106	50.0%	2.000
Brentwood Colony	Faulkton	Public	6	6	100.0%	1.000
Bridgewater	Bridgewater	Public	11	14	78.6%	1.273
Challenge Center	Sioux Falls	Public	19	18	105.6%	0.947
Clark	Clark	Public	25	27	92.6%	1.080
Dell Rapids	Dell Rapids	Public	50	69	72.5%	1.380
Enning	Sturgis	Public	3	3	100.0%	1.000
Eugene Field	Sioux Falls	Public	19	38	50.0%	2.000
Evergreen Colony	Faulkton	Public	5	5	100.0%	1.000
Holy Rosary	Kranzburg	Private	4	5	80.0%	1.250
Horace Mann	Sioux Falls	Public	17	35	48.6%	2.059
Horace Mann	Rapid City	Public	40	48	83.3%	1.200
Hutterische Colony	Tyndall	Public	6	6	100.0%	1.000
Kimball	Kimball	Public	17	16	106.3%	0.941
Laura B Anderson	Sioux Falls	Public	38	51	74.5%	1.342
Lowell	Sioux Falls	Public	7	54	13.0%	7.714
Lower Brule	Lower Brule	BIA	13	18	72.2%	1.385
Madison	Huron	Public	21	22	95.5%	1.048
McCook Central	Salem	Public	19	22	86.4%	1.158
McKinley	Watertown	Public	28	44	63.6%	1.571
Miller Area	Miller	Public	29	40	72.5%	1.379
New Holland	New Holland	Private	2	5	40.0%	2.500
Our Lady of Lourdes	Pine Ridge	BIA	18	53	34.0%	2.944
Pinedale	Rapid City	Public	37	57	64.9%	1.541
Seton	Rapid City	Private	34	50	68.0%	1.471
South Park	Rapid City	Public	23	57	40.4%	2.478
South Shore	South Shore	Public	8	9	88.9%	1.125
St Michael	Sioux Falls	Private	44	48	91.7%	1.091
Tiospaye Topa	Ridgeview	BIA	14	13	107.7%	0.929
Upland Colony	Forestburg	Public	4	4	100.0%	1.000
All Participating Sch	nools		643	977	65.8%	





#### CHILD HEALTH SCREENING FORM

	Date of Screening _	/	_/2006
	These four boxes must con	tain a valid code (either	0,1, or 2)
Untreated Cavities:	0=No untreated decay 1=Untreated decay	Treated Cavities:	0=No treated cavities 1=Treated cavities
Sealants on 1 <sup>st</sup> Molars:	0=No sealants present 1=Sealants present	Treatment Urgency:	0=No obvious problem 1=Early dental care 2=Urgent care
Staple this scree	ening form to the appropria	te child's consent form	OR fill out the following:
Child's Name:		Date of Birth:	
School's Name:			

Return these forms (this screening form stapled to the parents consent form) to:

Julie Ellingson Oral Health Coordinator South Dakota Dept. of Health 615 East 4<sup>th</sup> Street Pierre, SD 57501

### South Dakota Department of Health Dental Health Survey Parental Consent Form

#### Return this form to school as soon as possible.

Only children that return this signed form may participate in the free dental health screening.

Child's Name:	Gender:	Male	Female
Child's Birth Date (Month/Day/Year):	Child's Ag	je:	
Teacher's Name: Sc			
YES, I give permission for my child to participal dental screening. I understand that the inform of Health to improve the health of South Dakot confidential, and no names or identifiers will be NO, I do not give permission for my child to ha	nation is being collected a children. My child's he a used to report the scre	to assist the Dealth information	epartment
Signature of Parent or Guardian	Phone Number	Date	
Please answer the following questions to help us learn you do not want to answer the questions your child ma	ay still participate in the		our state. If
I. When was your child's most recent dental visit? ((	•	ava ava (ma ta	<b>#</b> 0)
Within the last 12 months (skip to #3)	M al-Mallan and and the advantat		
1-2 years ago (go to #2)	(go to #2)	never been to	a dentist
2. What are the main reasons your child has not visit		• ,	
Cost	, ,	etting appointr	
No reason to go (no dental problems)		ension, pain, c	_
My child is too young to see a dentist I do not have or know a dentist	Cannot get to	o tne dental off n:	
3. Is your child's dental care paid for by: (Check all t	hat apply)		
Cash	Private denta	al insurance	
Medicaid/Medical Assistance	Other		
Indian Health Service	Don't know		
4. Of the following, which best describes your child?	(Please check all that a	apply)	
White	Asian		
Black or African American	American Inc	dian	
Hispanic	Other		
5. Does your child receive free or reduced price scho	ool lunches? No.	Yes	
THANK YOU FOR PARTICIPATING IN THE S			

#### **ORAL HEALTH REFERRAL FORM**

Child's Name:	School:
Dear Parent or Guardian,	
at school. No x-rays were	a Oral Health Survey your child received a dental screening aken and the screening does not replace an in-office denta dentist. The results of the screening indicate that:
Your child has dentist will determine whe	some teeth that should be checked by your family dentist. You ther treatment is needed.
	some teeth that appear to be in need of immediate care. Contact as possible for a complete check-up.
• • •	bout this oral health survey or the location of a dentist, please South Dakota Department of Health, Oral Health Program: 605

#### References

- Centers for Disease Control. Oral Health Resources. Retrieved July 25, 2006, from www.cdc.gov/oralhealth/topics/child.htm
- U.S. Department of Health and Human Services. Oral health in America: a report of the Surgeon General. Rockville, MD: National Institute of Dental and Craniofacial Research, 2000.